

5. PERSONNEL

STANDARD 5.1

The Washoe County Sheriff's Office Division Director ensures that each individual receives the appropriate training and education commensurate with the examinations and testimony provided by those individuals. The DNA Criminalists/Analysts, CODIS Administrator, and DNA Technical Leader maintain a file of their current education and training.

5.1.1 Written job descriptions for personnel that define responsibilities, duties and skills are in Doc ID [1830](#).

5.1.2 A documented training program for qualifying all DNA Criminalists/Analysts is described in a separate document entitled "Criminalist Training Manual".

5.1.2.1 The training manual covers all DNA analytical procedures that DNA Criminalists/Analysts will perform. Practical exercises include the examination of a range of samples routinely encountered in casework.

5.1.2.2 The training program teaches and assesses the skills and knowledge required to perform DNA analysis.

5.1.2.2.1 The training program culminates in the demonstration of competency through successful completion of all assessments throughout the entire DNA training program; see Doc ID [1842](#) for all components of this testing.

5.1.2.2.2 When hiring experienced DNA Criminalists, the Technical Leader is responsible for ensuring their previous training is adequate and documented. For experienced DNA Criminalists, an abbreviated training program may be appropriate subject to the approval of the Technical Leader. Completion of the modified training program will be assessed and documented by the Technical Leader.

5.1.2.2.3 All DNA Criminalists, regardless of previous experience, shall successfully complete competency testing in the specific DNA analytical techniques to be used prior to participating in independent casework analysis.

5.1.3 Continuing Education Program

5.1.3.1 The DNA Technical Leader, CODIS Administrator, and DNA Criminalists/Analysts shall stay abreast of developments within the field of DNA typing by attending seminars, courses, professional meetings, or documented training sessions/classes in relevant subject areas at least once each calendar

Document ID	Revision	Approval	Date Published
1831	12	Supervising Criminalist - Biology	8/9/2018 5:03:00 PM

year. A minimum of eight cumulative hours of continuing education are required annually and shall be documented. Each DNA Criminalist/Analyst is responsible for documentation of the required annual training by maintaining a file of continuing education certificates, memos, and letters. Any documentation of continuing education must also be forwarded to the employee's supervisor and the Division Quality Assurance Manager.

5.1.3.1.1 If continuing education is conducted internally (i.e. presented by members of the laboratory system), the title of the program, a record of the presentation, date of the training, attendance list, and the curriculum vitae of the presenter(s) shall be documented and retained by the Supervising Criminalist.

5.1.3.1.2 If the continuing education is conducted externally (i.e. presented by individuals external to the laboratory), documentation of attendance through a mechanism such as certificates, program agenda/syllabus, or travel documentation will be maintained in Qualtrax. Attendance at a national or international conference shall be deemed to provide a minimum of 8 hours of continuing education.

5.1.3.1.3 Programs based on multimedia or internet delivery must be approved by the DNA Technical Leader. Participation in such programs shall be formally recorded and their completion shall be submitted to the DNA Technical Leader for review and approval. The documentation shall include the time required to complete the program.

5.1.3.2 The DNA Technical Leader shall ensure that the laboratory has a program documenting the Criminalists' annual review of scientific literature. This is accomplished by maintaining a folder of annual required reading where the Criminalist initials completion of each article. This review may be accomplished by attending a presentation that reviews a scientific article. The laboratory shall maintain or have physical or electronic access to a collection of current books, journals, or other literature applicable to DNA analysis.

5.1.3.3 Each Criminalist must maintain records of their relevant qualifications, training, skills, and experience.

STANDARD 5.2

DNA Technical Leader qualifications:

Document ID	Revision	Approval	Date Published
1831	12	Supervising Criminalist - Biology	8/9/2018 5:03:00 PM

5.2.1 The DNA Technical Leader, David Jackson, has a Bachelor of Science Degree in Genetics from the University of Liverpool, UK, and Master of Science Degree in DNA Profiling from the University of Central Lancashire, UK, and has successfully completed the following:

Molecular Basis of Life I & II, 2LS13 & 2LS00:

Containing: Principles of Molecular Biology (2.5 Credits)
Introductory Biochemistry (2.5 Credits)
Biochemical Methods (2.5 Credits)

Fundamental Molecular Biology, 2LS31 (5 Credits)

Microbial Genetics, 2LS06 (5 Credits)

Genetics of Higher Organisms, 2LS08 (5 Credits)

Human Genetics Mol. Bio & Disease, 1LH21 (2.5 Credits)

Genome Organisation & Evolution, 2LH18 (5 Credits)

Genome Maintenance & Rearrangement, 2LH19 (5 Credits)

Gene Expression, 2LH1B (5 Credits)

Forensic Genetics I & II, Graduate Classes (8 Credits)

Containing: Biochemistry & Genetics

Population Genetics, 1LH15 (2.5 Credits)

Population Genetics & Statistics Graduate Class (4 Credits)

5.2.1.1 David Jackson exceeds the required 12 semester hours with 49.5 semester credits of required studies. David Jackson's classes include 12 semester credits obtained through graduate level classes with the requirement being at least one graduate level class registering three or more semester or equivalent credit hours.

5.2.1.2 David Jackson's educational requirements for a DNA Technical Leader have been approved during external audits according to the Federal Standards by the following: 2017- Jennifer Mihalovich, Tuan Nguyen, Stephen Gicale, and Kris Cano; and 2018 – Caitlin Oliver and Kristin Schelling.

5.2.1.3 Brittney Chilton's educational requirements for a DNA Technical Leader have been approved during an external audit according to the Federal Standards by the following: 2017- Jennifer Mihalovich, Tuan Nguyen, Stephen Gicale, and Kris Cano.

5.2.2 Minimum experience requirements: David Jackson started working with human DNA in a forensic setting in November 2008 and completed training in June 2010. His experience was obtained at a laboratory where forensic DNA testing was conducted for the identification and evaluation of biological evidence in criminal matters. He successfully completed the FBI sponsored auditor training in 2013.

5.2.3 David Jackson, the DNA Technical Leader is responsible for the following:

5.2.3.1 General duties and authority:

Document ID	Revision	Approval	Date Published
1831	12	Supervising Criminalist - Biology	8/9/2018 5:03:00 PM

5.2.3.1.1 Manages the technical operations of the laboratory

5.2.3.1.2 Authorizes the initiation, suspension, and resuming of DNA analytical operations for the laboratory or an individual

5.2.3.2 The minimum specific responsibilities performed by David Jackson include the following:

5.2.3.2.1 Evaluates and documents approval of all validations and methods used by the laboratory and proposes new or modified analytical procedures to be used by analysts via a memo to the Section Supervisor, Quality Assurance Manager, and Division Director.

5.2.3.2.2 Reviews the academic transcripts and training records for analysts and approves their qualifications prior to independent casework analysis and documents such review.

5.2.3.2.2.1 David Jackson approves of the qualifications and training records for Brittney Chilton, Jennifer Naranjo, Monica Siewertsen, Stephen Gresko, and Kindra Baum.

5.2.3.2.3 Approves the technical specifications for outsourcing agreements.

5.2.3.2.4 Reviews internal and external DNA Audit documents and, if applicable, corrective action(s) to ensure that findings, if any, were appropriately addressed and documented.

5.2.3.2.5 Reviews, on an annual basis, the standard operating procedures of the laboratory and documents such review through revisions of the protocol.

5.2.3.2.6 Reviews and approves the training, quality assurance, and proficiency testing programs in the DNA section.

5.2.3.2.7 Reviews requests by contract employees for employment by multiple NDIS participating and/or vendor laboratories and, if no potential conflict of interest exists, may approve such requests.

5.2.4. Accessibility: The DNA Technical Leader, David Jackson is on-site.

5.2.4.1 David Jackson is a full time employee of the laboratory.

5.2.4.1.1 In the event that the Technical Leader position is vacated and there is no individual in the laboratory that meets the requirements of this standard or will serve as a Technical Leader, an individual satisfying the

Document ID	Revision	Approval	Date Published
1831	12	Supervising Criminalist - Biology	8/9/2018 5:03:00 PM

Technical Leader requirements from the Las Vegas Metropolitan Police Department will become the Technical Leader for the WCSO DNA Section. The WCSO DNA Section will immediately contact the NDIS Custodian and submit the contingency plan within 14 days to the FBI for its approval. Work in progress by the laboratory may be completed during this 14 day period but new casework shall not be started until the plan is approved by the FBI. With the approval of the FBI, a laboratory may rely upon an external Technical Leader for a period not to exceed one year.

5.2.5 The DNA Technical Leader, David Jackson, reviewed all validation studies and methodologies that were being utilized in the laboratory at the time of his appointment as DNA Technical Leader. Each validation summary was initialed by David Jackson. David Jackson reviewed the educational qualifications and training records of the analysts currently qualified when David Jackson was appointed as DNA Technical Leader. These analysts have memos/certificates in their training folders.

STANDARD 5.3

DNA Criminalist/Analyst and CODIS Administrator (i.e. Casework CODIS Administrator) qualifications:

Casework CODIS Administrator, Stephen Gresko:

5.3.1 Stephen Gresko has a Bachelor of Science Degree in Zoology from Brigham Young University, Utah. Stephen Gresko started working with human DNA in a forensic setting in June 2001.

Casework CODIS Administrators shall have successfully completed college coursework (graduate or undergraduate level) from the following subject areas: biochemistry, genetics and molecular biology, or other subjects which provide a basic understanding of the foundation of forensic DNA analysis; and coursework and/or training in statistics and population genetics as it applies to forensic DNA analysis. Casework CODIS Administrators must have a minimum of nine cumulative semester or equivalent hours that cover the required subject areas. Casework CODIS Administrators who have completed coursework with titles other than those listed above can demonstrate compliance with this standard through documented transcripts, a letter from a university professor supporting course content, or a course syllabus. The Technical Leader must document approval of compliance with this standard.

Stephen Gresko meets the course requirements through the following:

Biological Chemistry, CHEM 3510 (3 credits, Biochemistry)
Molecular Biology, ZOOL 371 (2 credits, Molecular Biology)
Genetics, ZOOL 372 (2 credits, Genetics)

Document ID	Revision	Approval	Date Published
1831	12	Supervising Criminalist - Biology	8/9/2018 5:03:00 PM

Genetics/Cell Bio Lab, ZOOL 374 (1 credit, Biochemistry/Molecular Biology/Genetics)
Cellular Biology, ZOOL 373 (3 credits, Biochemistry/Molecular Biology)
Forensic Population Statistics, Week-long Course taught by George Carmody at AFDIL (Statistics)

Stephen Gresko's educational requirements for a Casework CODIS Administrator have been reviewed and approved during external audits according to the Federal Standards by the following: 2011-Pamela Mikulcik, Kimberly Wilutis, and Robin Rothove; 2013-Hayne Hamilton and Sandy Shaffer; 2017- Jennifer Mihalovich, Tuan Nguyen, Stephen Gicale, and Kris Cano; and 2018 – Caitlin Oliver and Kristin Schelling.

5.3.2 The Casework CODIS Administrator shall have six months of forensic human DNA laboratory experience with documented mixture interpretation training.

Stephen Gresko started working with human DNA in a forensic setting in June 2001 and has completed training at the Washoe County Sheriff's Office Forensic Science Division in August 2010. He completed the analysis of a range of samples routinely encountered in forensic casework during his training and this training including DNA mixture interpretation. He also successfully completed competency testing prior to beginning independent DNA analysis. The completion of his training and competency testing is documented in his training file.

5.3.3 Stephen Gresko participated in the FBI sponsored training in CODIS from 2/1/10-2/5/10. Stephen successfully completed the FBI sponsored auditor training on 02/17/11.

5.3.4 Stephen Gresko, State CODIS Administrator is responsible for the following:

5.3.4.1 General duties and authority:

5.3.4.1.1 Manages the laboratory's CODIS network

5.3.4.1.2 Oversees and documents CODIS computer training

5.3.4.1.3 Safeguards the security of the DNA profile data stored in CODIS in accordance with state and / or federal law and NDIS operational procedures

5.3.4.1.4 Ensures the quality of data stored in CODIS is in accordance with state and/or federal law and NDIS operational procedures

5.3.4.1.5 Ensures matches are dispositioned according to NDIS operational procedures

5.3.5 Stephen Gresko is authorized to terminate a DNA Criminalist's or the laboratory's participation in CODIS until the reliability and security of the computer data can be assured in the event an issue with the data is identified. As the State CODIS

Document ID	Revision	Approval	Date Published
1831	12	Supervising Criminalist - Biology	8/9/2018 5:03:00 PM

Administrator, this authority extends to the local CODIS site, the Las Vegas Metropolitan Police Department.

- 5.3.6 In the event that the State CODIS Administrator position at WCSO is vacated and there is no individual in the laboratory that meets the requirements of this standard or will serve as the State CODIS Administrator, WCSO will immediately contact the NDIS Custodian and submit an action plan within 14 days to the FBI for approval. No new profiles will be uploaded to NDIS during the vacancy.

STANDARD 5.4

DNA Criminalist/Analyst qualifications:

- 5.4.1 Monica Siewertsen has a Bachelor of Science Degree in Biology from the University of Waterloo, Canada
Jennifer Naranjo has a Bachelor of Science Degree in Environmental Science from New Mexico Highlands University, New Mexico
Kindra Baum has a Bachelor of Science Degree in Biochemistry from the University of Nevada, Reno
Brittney Chilton, has a combined Bachelor of Science and Master of Science Degree in Biotechnology from the University of Nevada, Reno

DNA Criminalists/Analysts shall have successfully completed college coursework (graduate or undergraduate level) from the following subject areas: biochemistry, genetics and molecular biology, or other subjects which provide a basic understanding of the foundation of forensic DNA analysis; and coursework and/or training in statistics and population genetics as it applies to forensic DNA analysis.

Monica Siewertsen meets the course requirements through the following:

Biochemistry, CHEM 237 (equivalent to 3 US credits, Biochemistry)
Structural Biochemistry, CHEM 332 (equivalent to 3 US credits, Biochemistry)
Microbial Biotechnology, BIOL 342 (equivalent to 3 US credits, Molecular Biology)
Biotechnology I, BIOL 480 (equivalent to 3 US credits, Molecular Biology)
Genetics, BIOL 239 (equivalent to 3 US credits, Genetics)
Stats for Biologists, STAT 202, (equivalent to 3 US credits, Statistics)
California Association of Criminalistics Statistics Workshop (Statistics)

Jennifer Naranjo meets the course requirements through the following:

Introduction to Biochemistry, BCH 600 (4 credits, Biochemistry)
Molecular Genetics, BCH 705 (4 credits, Genetics)
Molecular Biology, BCH 605 (3 credits, Molecular Biology)
Intro to Probability and Statistics, MATH 115 (3 credits, Statistics)

Document ID	Revision	Approval	Date Published
1831	12	Supervising Criminalist - Biology	8/9/2018 5:03:00 PM

Forensic Population Genetics and Statistics 11/06 (Statistics)

Kindra Baum meets the course requirements through the following:

Introduction to Biochemistry, BCH 400 (4 credits, Biochemistry)
Principles of Genetics, BIOL 313 (3 credits, Genetics)
Molecular Biology, BCH 405 (3 credits, Molecular Biology)
Population Statistics and Forensic DNA Analysis, 04/2010 (Statistics)

Brittney Chilton meets the course requirements through the following:

Introduction to Biochemistry, BCH 400 (4 credits, Biochemistry)
Molecular Genetics, BCH 705R (3 credits, Genetics)
Molecular Biology, BCH 405 (3 credits, Molecular Biology)
Introduction to Statistics, STAT 152 (3 credits, Statistics)

5.4.1.1. Monica Siewertsen's educational requirements for a DNA analyst have been reviewed and approved during external audits according to the Federal standards by the following: 2009-Kim Murga, Kathy Guenther, and Julie Marschner; 2010- Jonathan Newman and Deanna Lankford; 2017- Jennifer Mihalovich, Tuan Nguyen, Stephen Gicale, and Kris Cano; and 2018 – Caitlin Oliver and Kristin Schelling.

Jennifer Naranjo's educational requirements for a DNA analyst have been reviewed and approved during external audits according to the Federal Standards by: 2005-Cynthia Hall; 2007-Ann Marie Gross and James T. Iverson; 2009-Kim Murga, Kathy Guenther, and Julie Marschner; 2010-Jonathan Newman and Deanna Lankford; 2017- Jennifer Mihalovich, Tuan Nguyen, Stephen Gicale, and Kris Cano; and 2018 – Caitlin Oliver and Kristin Schelling.

Kindra Baum's educational requirements for a DNA analyst have been approved during external audits according to the Federal Standards by the following: 2011-Pamela Mikulcik, Kimberly Wilutis, and Robin Rothove; 2013-Hayne Hamilton and Sandy Shaffer; 2017- Jennifer Mihalovich, Tuan Nguyen, Stephen Gicale, and Kris Cano; and 2018 – Caitlin Oliver and Kristin Schelling.

Brittney Chilton's educational requirements for a DNA analyst have been approved during external audits according to the Federal Standards by the following: 2013-Hayne Hamilton and Sandy Shaffer; 2015- Jessica Charak, Julie Marschner, and Cassandra Robertson; 2017- Jennifer Mihalovich, Tuan Nguyen, Stephen Gicale, and Kris Cano; and and 2018 – Caitlin Oliver and Kristin Schelling.

5.4.1.2. All analysts have a minimum of nine cumulative semester or equivalent hours that cover the required subject areas.

Document ID	Revision	Approval	Date Published
1831	12	Supervising Criminalist - Biology	8/9/2018 5:03:00 PM

5.4.1.3. Analysts who have completed coursework with titles other than those listed in 5.4.1 above can demonstrate compliance with this standard through documented transcripts, a letter from a university professor supporting course content, or a course syllabus. The Technical Leader has documented approval of compliance with this standard.

5.4.2 Minimum experience requirements: The DNA Criminalist/Analyst shall have six months of forensic human DNA laboratory experience.

Monica Siewertsen started working with human DNA in a forensic setting in 1995 and has completed training at the Washoe County Sheriff's Office Forensic Science Division in May 2009. Jennifer Naranjo started working with human DNA in a forensic setting in September 2005 and completed training in April 2006. Kindra Baum started working with human DNA in a forensic setting in July 2008 and has completed training at the Washoe County Sheriff's Office Forensic Science Division in December 2010. Brittney Chilton started working with human DNA in a forensic setting in April 2012 and completed training in July 2013.

5.4.2.1 All DNA Criminalists/Analysts completed the analysis of a range of samples routinely encountered in forensic casework prior to independent work using DNA technology. This completion is documented in their training files.

5.4.2.2 All DNA Criminalists/Analysts successfully completed competency testing before beginning independent DNA analysis. This completion is documented in their training files.

STANDARD 5.5

The technical reviewer shall be an employee or contract employee of the laboratory and shall meet the following qualifications:

5.5.1 A current or previously qualified analyst in the methodologies being reviewed.

5.5.2 Successful completion of competency testing administered by the NDIS participating laboratory prior to participating in the technical review of DNA data.

5.5.3 Participation in an external proficiency testing program at an NDIS participating laboratory on the same technology, platform and typing amplification test kit used to generate the DNA data being reviewed.

5.5.4 An individual conducting technical reviews must have three months of casework experience in the laboratory where the technical reviews are being conducted.

Each DNA technical reviewer is an employee or contract employee of the laboratory; is currently or previously qualified analyst in the methodologies being reviewed; has successfully completed competency testing administered by WCSO Forensic Science Division prior to participating in the technical review of data; and participates in an external proficiency testing program at the WCSO

Document ID	Revision	Approval	Date Published
1831	12	Supervising Criminalist - Biology	8/9/2018 5:03:00 PM

Forensic Science Division on the same technology, platform, and typing amplification kit used to generate the DNA data being reviewed. Kindra Baum, Stephen Gresko, and Brittney Chilton each had six months casework experience prior to conducting technical reviews. DNA Criminalists prior to this (Monica Siewertsen, and Jennifer Naranjo) did not have a casework experience requirement to be fulfilled prior to conducting technical reviews.

STANDARD 5.6

Currently, there are no technicians in the Biology Unit.

STANDARD 5.7

Currently, there is one DNA Office Support Specialist, Jennifer Beckman-Salas, and currently no Investigative Assistant or DNA Interns. When employed, DNA Interns and Investigative Assistants will learn the basic support operations of a forensic biology lab. DNA Interns and Investigative Assistants will be expected to perform various laboratory support duties determined by the DNA Technical Leader and Biology Unit Supervisor. DNA Interns and Investigative Assistants may also have the opportunity for casework observation, methods training, and biology or DNA related projects relevant to the forensic community in the Biology Unit. The primary role of the Office Support Specialist is the management of offender samples (convicted and arrested) within the Forensic Science Division. DNA Interns, Investigative Assistants, and Office Support Specialists will not perform casework examinations. Documented training programs for DNA Interns and Investigative Assistants are described in separate documents entitled "Intern Training Manual" and "Investigative Assistant Training Manual". Documents describing the training program for the Office Support Specialist are currently in progress.

Document ID	Revision	Approval	Date Published
1831	12	Supervising Criminalist - Biology	8/9/2018 5:03:00 PM